IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A method for reducing charging damage to a substrate in a plasma processing system comprising the steps:

coupling a first power to said plasma processing system to perform a first process on said substrate using a first plasma; ~~and~~

after said first process, coupling a second power to said plasma processing system, wherein said second power is lower than said first power and selected to reduce the accumulation of negative charge on at least one surface of said plasma processing system arising from applying said first power; and

after coupling said second power, coupling a third power lower than said second power to perform a second process on said substrate.

Claim 2 (Currently Amended): The method as recited in claim 1, wherein said second power is ~~less than said first power~~ non-cyclical.

Claim 3 (Original): The method as recited in claim 1, wherein said second power corresponds to a secondary electron yield greater than unity from at least one of said at least one exposed surface.

Claim 4 (Original): The method as recited in claim 1, wherein said coupling of said second power follows said coupling of said first power without extinguishing said plasma.

Claim 5 (Currently Amended): A method for reducing charging damage to a substrate in a plasma processing system comprising the steps:

coupling a first power to said plasma processing system to process said substrate using a first plasma;

coupling a second power to said plasma processing system, wherein said second power is selected to reduce the accumulation of negative charge on at least one surface of said plasma processing system arising from applying said first power ~~The method as recited in claim 1~~, wherein the process further comprising:

extinguishing said first plasma corresponding to said coupling of said first power; and

forming a second plasma, wherein said coupling of said second power forms said second plasma.

Claims 6-7 (Canceled).

Claim 8 (Original) The method as recited in claim 1, wherein said coupling of said third power follows said coupling of said second power without extinguishing said first plasma.

Claims 9-10 (Canceled).

Claim 11 (Currently Amended): The method as recited in claim [[9]] 8, further comprising: extinguishing said second plasma corresponding to said coupling of said second power; and

coupling [[a]] said third power to said plasma processing system, wherein said coupling of said third power forms a third plasma~~; and~~

~~continuing to process said substrate using said third power~~.

Claim 12 (Original): The method as recited in claim 1, wherein said coupling of said first power to said plasma processing system alternates with said coupling of said second power to said plasma processing system during said processing of said substrate.

Claim 13 (Original): The method as recited in claim 1, wherein said first power is greater than approximately 1000 W.

Claim 14 (Currently Amended): The method as recited in claim [[7]] 1, wherein said third power is less than approximately 500 W.

Claim 15 (Original): The method as recited in claim 1, wherein said second power is selected to reduce the .accumulation of negative charge on said substrate.

Claim 16 (Original): The method as recited in claim 1, wherein said second power is selected to reduce the accumulation of negative charge on an electrode.

Claim 17 (Original): The method as recited in claim 1, wherein said second power is selected to reduce the accumulation of negative charge on a substrate holder.

Claim 18 (Currently Amended): The method as recited in claim 1, wherein the at least one ~~of the exposed surfaces~~ surface comprises silicon.

Claim 19 (Original): The method as recited in claim 1, wherein at least one of the exposed surfaces comprises alumina.

Claim 20 (Original): The method as recited in claim 1, wherein said second power is greater than approximately 80 W and less than approximately 1310 W.

Claim 21 (Original): The method as recited in claim 1, wherein said second power is greater than approximately 115 Wand less than approximately 1060 W.

Claim 22 (Original): The method as recited in claim 1, wherein said second power is greater than approximately 205 W and less than approximately 840 W.

Claim 23 (Original): The method as recited in claim 1, wherein said second power is greater than approximately 260 W and less than approximately 640 W.

Claim 24 (Original): The method as recited in claim 1, wherein said second power is greater than approximately 400 W and less than approximately 640 W.

Claim 25 (Original): The method as recited in claim 3, wherein said secondary electron yield greater than unity corresponds to a range of electron energy from ε_{min} to ε_{max}, and said second power corresponds to $(\varepsilon/C)^2$, wherein E comprises an electron energy in said range and C comprises a constant.

Claim 26 (Original): The method as recited in claim 25, wherein said constant ranges from approximately a value of 10 to 20.

Claim 27 (Original): The method as recited in claim 26, wherein said constant is approximately 14.

Claim 28 (Original): The method as recited in claim 25, wherein said minimum electron energy is approximately 125 eV, and said maximum electron energy is approximately 500 eV.

Claim 29 (Original): The method as recited in claim 25, wherein said range of electron energy further comprises a peak electron energy ε_{peak}, said peak electron energy corresponds to a peak in the secondary electron yield.

Claim 30 (Original): The method as recited in claim 29, wherein said peak electron energy is approximately 250 eV.

Claim 31 (Original): The method as recited in claim 29, wherein said second power corresponds to an electron energy ranging from approximately the peak electron energy minus 10% to the peak electron energy plus 50%.

Claim 32 (Original): The method as recited in claim 29, wherein said second power corresponds to an electron energy ranging from approximately the peak electron energy minus 20% to the peak electron energy plus 60%.

Claim 33 (Currently Amended): A method for reducing negative charge on exposed surfaces within a plasma processing chamber comprising the steps:

introducing an ionizable gas into said plasma processing chamber; ~~and~~

coupling a first power to the ionizable gas to perform a first process in said chamber;

forming a plasma by coupling an intermediate power less than said first power to said ionizable gas, wherein said intermediate power causes a secondary electron yield to be greater than unity from at least one of said exposed surfaces; and

coupling a post process power less than said intermediate power to said ionizable gas to perform a second process in said chamber.

Claim 34 (Original): The method as recited in claim 33, wherein said exposed surfaces comprise at least one substrate holder surface.

Claim 35 (Original): The method as recited in claim 33, wherein said exposed surfaces comprise at least one electrode surface.

Claim 36 (Original): The method as recited in claim 33, wherein said exposed surfaces comprise at least one silicon surface.

Claim 37 (Original): The method as recited in claim 33, wherein at least one of the exposed surfaces comprises silicon.

Claim 38 (Original): The method as recited in claim 33, wherein at least one of the exposed surfaces comprises alumina.

Claim 39 (Original): The method as recited in claim 33, wherein said intermediate power is greater than approximately 80 W and less than approximately 1310 W.

Claim 40 (Original): The method as recited in claim 33, wherein said intermediate power, is greater than approximately 260 W and less than approximately 640 W.

Claim 41 (Currently Amended): A method for reducing charging damage to a substrate in a plasma processing system comprising the steps:

introducing an ionizable gas;

forming a plasma from said ionizable gas;

exposing said substrate to said plasma; ~~and~~

extinguishing said plasma; and

after said extinguishing, processing said substrate by coupling an intermediate power to said plasma processing system, wherein said intermediate power reduces the accumulation of negative charge on a substrate surface exposed to said plasma in said plasma processing system.

Claim 42 (Currently Amended): The method as recited in claim 41, wherein said ~~second~~ intermediate power is greater than approximately 80 W and less than approximately 1310 W.

Claim 43 (Currently Amended): The method as recited in claim 41, wherein said ~~second~~ intermediate power is greater than approximately 115 W and less than approximately 1060 W.

Claim 44 (Currently Amended): The method as recited in claim 41, wherein said ~~second~~ intermediate power is greater than approximately 205 W and less than approximately 840 W.

Claim 45 (Currently Amended): The method as recited in claim 41, wherein said ~~second~~ intermediate power is greater than approximately 260 W and less than approximately 640 W.

Claim 46 (Currently Amended): The method as recited in claim 41, wherein said ~~second~~ intermediate power is greater than approximately 400 W and less than approximately 640 W.

Claim 47 (Original): The method as recited in claim 41, wherein said intermediate power corresponds to a secondary electron yield greater than unity from said substrate surface.

Claim 48 (Original): The method as recited in claim 47, wherein said secondary electron yield greater than unity corresponds to a range of electron energy from ε_{min} to ε_{max}, and said second power corresponds to $(\varepsilon/C)^2$, wherein ε comprises an electron energy in said range and C comprises a constant.

Claim 49 (Original): The method as recited in claim 48, wherein said constant ranges from approximately a value of 10 to 20.

Claim 50 (Original): The method as recited in claim 49, wherein said constant is approximately 14.

Claim 51 (Original): The method as recited in claim 48, wherein said minimum electron energy is approximately 125 eV, and said maximum electron energy is approximately 500 eV.

Claim 52 (Original): The method as recited in claim 48, wherein said range of electron energy further comprises a peak electron energy ε_{peak}, said peak electron energy corresponds to a peak in the secondary electron yield.

Claim 53 (Original): The method as recited in claim 52, wherein said peak electron energy is approximately 250 eV.

Claim 54 (Currently Amended): The method as recited in claim 52, wherein said intermediate ~~second~~ power corresponds to an electron energy ranging from approximately the peak electron energy minus 10% to the peak electron energy plus 50%.

Claim 55 (Currently Amended): The method as recited in claim 52, wherein said intermediate ~~second~~ power corresponds to an electron energy ranging from approximately the peak electron energy minus 20% to the peak electron energy plus 60%.

Claim 56 (Currently Amended): A method for reducing charging damage to a substrate in a plasma processing system comprising the steps:

identifying at least one exposed surface in said plasma processing system;

providing a secondary electron emitter surface on at least one of the at least one exposed surface, wherein said secondary electron emitter surface comprises a material having a secondary electron yield greater than unity for a range of energy levels;

introducing an ionizable gas to said plasma processing system;

forming a plasma from said ionizable gas using a first power;

exposing a substrate to said plasma in a first process; and

coupling said intermediate power less than said first power to said plasma processing system to process said substrate, wherein said intermediate power corresponds to an energy level within said range of energy levels; and

performing a second process at a power level less than said intermediate power.

Claim 57 (Canceled).

Claim 58 (Currently Amended): A method for reducing charging damage to a substrate in a plasma processing system comprising the steps:

exposing said substrate to a plasma;

coupling a first power to said plasma processing system to process said substrate; and

coupling a second power to said plasma processing system, wherein said second power is less than the first power and selected to reduce the accumulation of electric charge on one or more surfaces exposed to said plasma in said plasma processing system; and

coupling a third power to said plasma processing system to post process said substrate.

Claim 59 (Original): The method as recited in claim 58, wherein said second power is less than said first power.

Claim 60 (Original): The method as recited in claim 58, wherein said second power corresponds to a secondary electron yield from at least one of said exposed surfaces greater than unity.

Claim 61 (Original): The method as recited in claim 58, wherein said coupling of said second power follows said coupling of said first power without extinguishing said plasma.

Claim 62 (Original): The method as recited in claim 58, wherein said coupling of said first power is terminated and said plasma is extinguished, and said coupling of said second power forms a second plasma.

Claim 63 (Original): The method as recited in claim 58, wherein said method further comprises coupling a third power to said plasma processing system to post-process said substrate.

Claim 64 (Original): The method as recited in claim 63, wherein said third power is less than said second power.

Claim 65 (Original): The method as recited in claim 63, wherein said coupling of said third power follows said coupling of said second power without extinguishing said plasma.

Claim 66 (Canceled).

Claim 67 (Currently Amended): The method as recited in claim ~~66~~ 62, wherein said coupling of said third power follows said coupling of said second power without extinguishing said second plasma.

Claim 68 (Currently Amended): The method as recited in claim ~~66~~ 62, wherein said coupling of said second power is terminated and said second plasma is extinguished, and said coupling of said third power forms a third plasma.

Claim 69 (Original): The method as recited in claim 58, wherein said coupling of said first power to said plasma processing system alternates with said coupling of said second power to said plasma processing system during said processing of said substrate.

Claim 70 (Original): The method as recited in claim 58, wherein said first power is greater than 1000 W.

Claim 71 (Original): The method as recited in claim 64, wherein said third power is less than 500 W.

Claim 72 (Original): The method as recited in claim 58, wherein said second power is greater than 50 W and less than 1500 W.

Claim 73 (Original): The method as recited in claim 58, wherein said second power is substantially 600 W.

Claim 74 (Currently Amended): A method for reducing charging damage to a substrate in a plasma processing system comprising the steps:

exposing said substrate to a plasma;

coupling a first power to said plasma processing system to process said substrate; and

coupling a second power to said plasma processing system, wherein said second power is selected to reduce the accumulation of electric charge on one or more surfaces exposed to said plasma in said plasma processing system ~~The method as recited in claim 58,~~ wherein said second power is higher than said first power.

Claim 75 (Original): The method as recited in claim 58, wherein said second power is selected to reduce the accumulation of negative charge on one or more surfaces exposed to said plasma, in said plasma processing system.

Claim 76 (Original): The method as recited in claim 58, wherein said second power is selected to reduce the accumulation of positive charge on one or more surfaces exposed to said plasma in said plasma processing system.

Claims 77-86 (Canceled).